

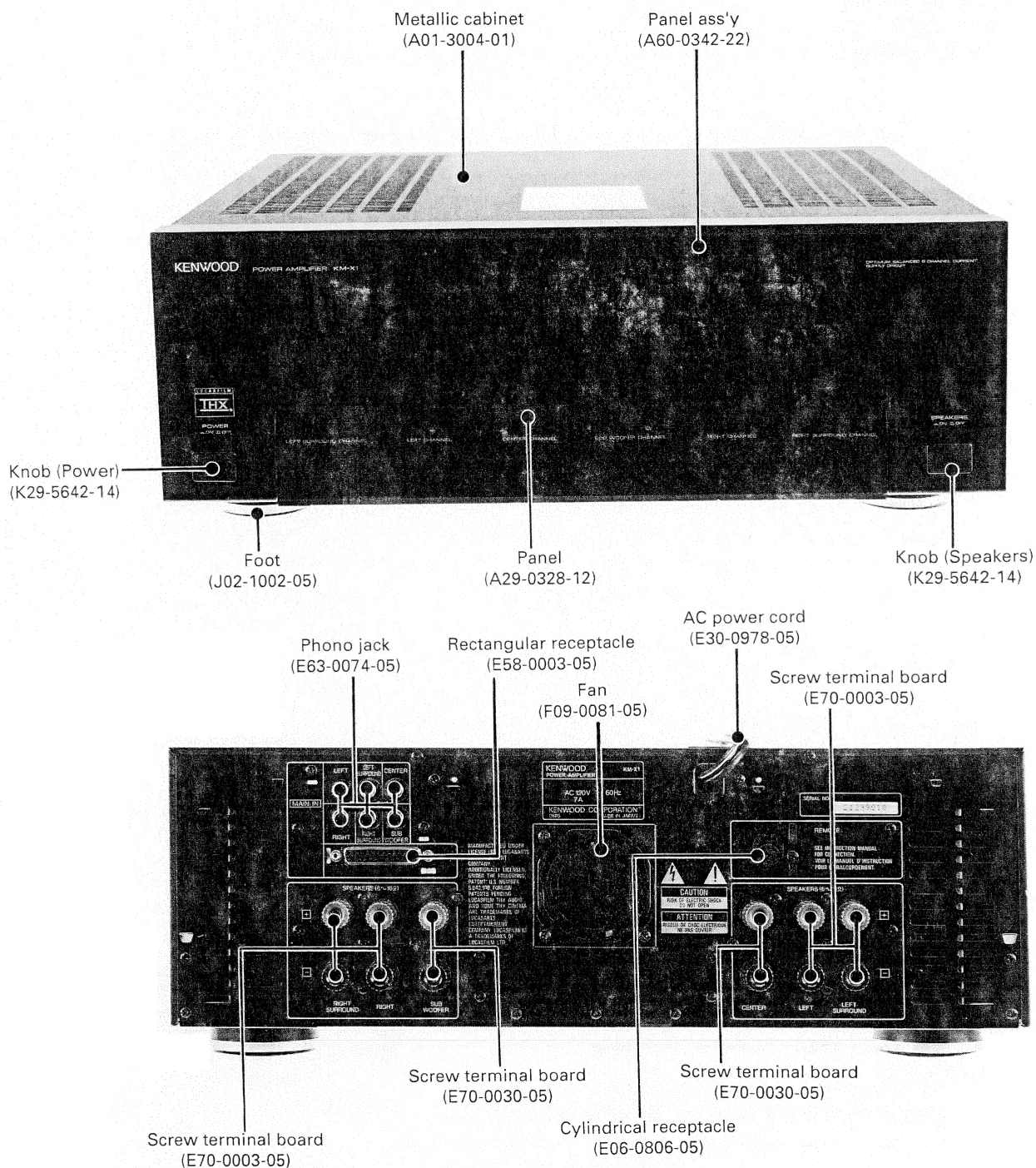
POWER AMPLIFIER

# KM-X1

## SERVICE MANUAL

# KENWOOD

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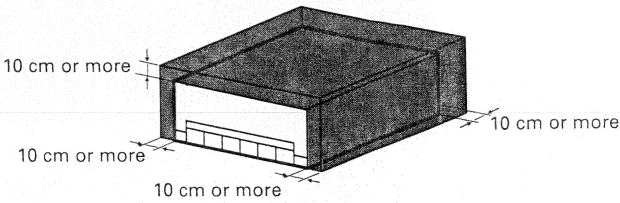
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Caution on heat generation

- This unit incorporates a cooling fan on the rear to deal with the large amount of heat generation. The fan starts rotation automatically when the internal temperature of the unit rises. Install the unit taking care not to block the ventilation (heat radiation).
- \* Reserve clearances of more than 10 cm on the left and right, behind and above the unit. When the unit is installed in a rack, do not close tight with a door.
- The cooling fan of this unit is designed to absorb external air. If curtain or sheet of paper is attracted to the unit, the internal temperature may rise, and the sound may not be produced when the protection circuitry is activated due to temperature rise. Please be careful against this.

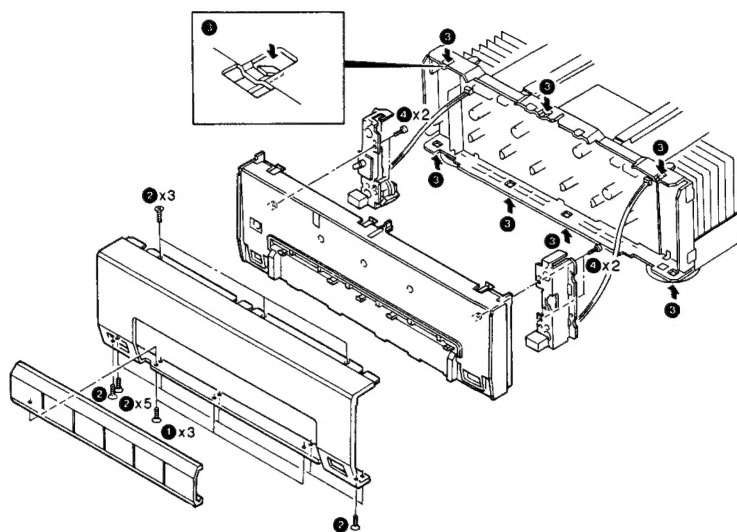
To allow heat radiation, leave a space, shown with [ ] between this unit and the walls or rack shelves.



## DISASSEMBLY FOR REPAIR

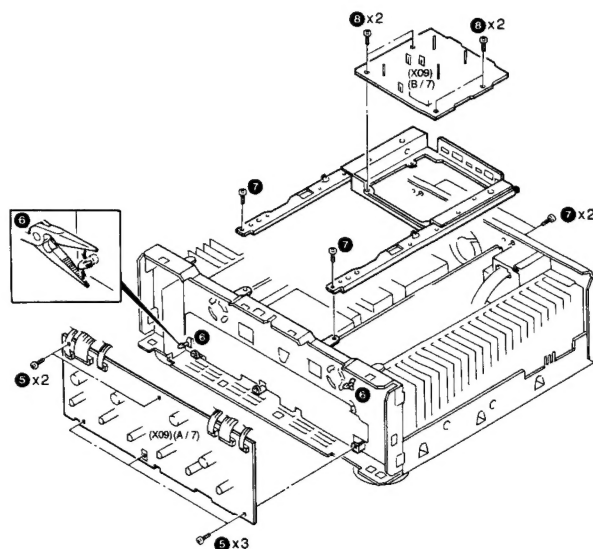
### 1) Removing the front panel and panel escutcheon

1. Remove the three screws (❶), then remove the small panel at the bottom.
2. Remove the 10 screws (❷), then remove the front panel.
3. Remove the seven hooks (❸), then remove the panel escutcheon.
4. Remove the four screws (❹), then remove the switch fitting.



### 2) Removing X09, A/7 (A-class PCB) and X09, B/7

5. Remove the five screws (❺).
6. Remove the two unit holders (❻), then remove the PCB.
7. Remove the four screws (❼), then remove the frame.
8. Remove the four screws (❽), then remove the PCB.

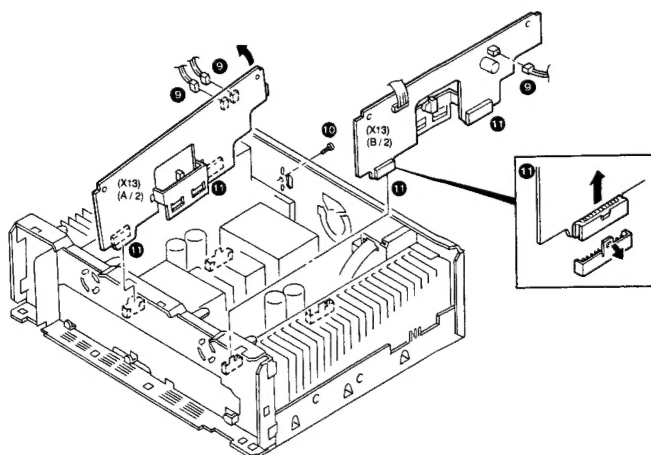


### 3) Removing X13 (B-class PCB)

9. Disconnect the three connectors (❾).
10. Remove the one screw (❿).
11. Disconnect the four connectors (⓫), then remove the PCB.

\* Move the R-side PCB (X13, B/2) to the sub-chassis side, lift the terminal side, and remove the PCB to prevent damage to the DB25 terminal.

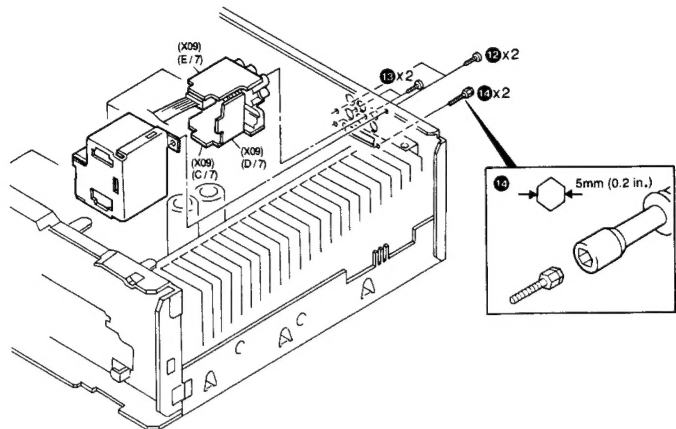
\* Note that the connector does not go in easily when the R-side PCB (X13, B/2) has been installed.



## DISASSEMBLY FOR REPAIR

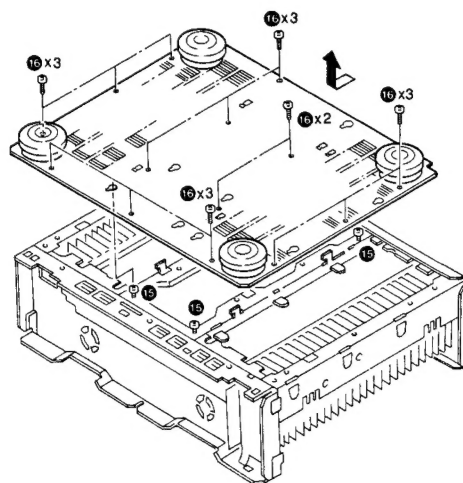
### 4) Removing the DB25 terminal

12. Remove the two screws (12), then remove the fitting.
13. Remove the two screws (13), then remove the two hexagonal-head bolts (14) with the box screwdriver (5 mm [0.2 in.]), and remove the PCB.



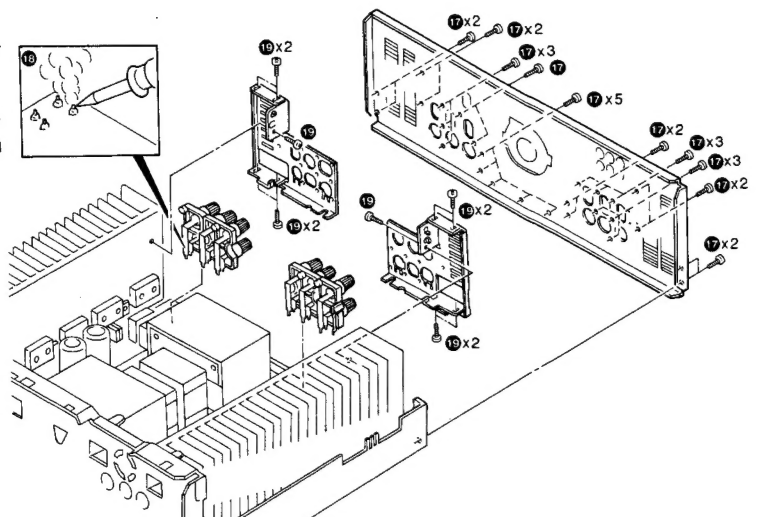
### 5) Removing the bottom plate

14. Loosen the three screws (15).
15. Remove the 14 screws (16), then slide the bottom plate slightly forward and remove it.



### 6) Removing the speaker terminals

16. Remove the 26 screws (17), then remove the rear panel.
17. Remove the solder from the speaker terminals (18), remove the 10 screws (19) holding the fitting, then remove the two speaker terminals.

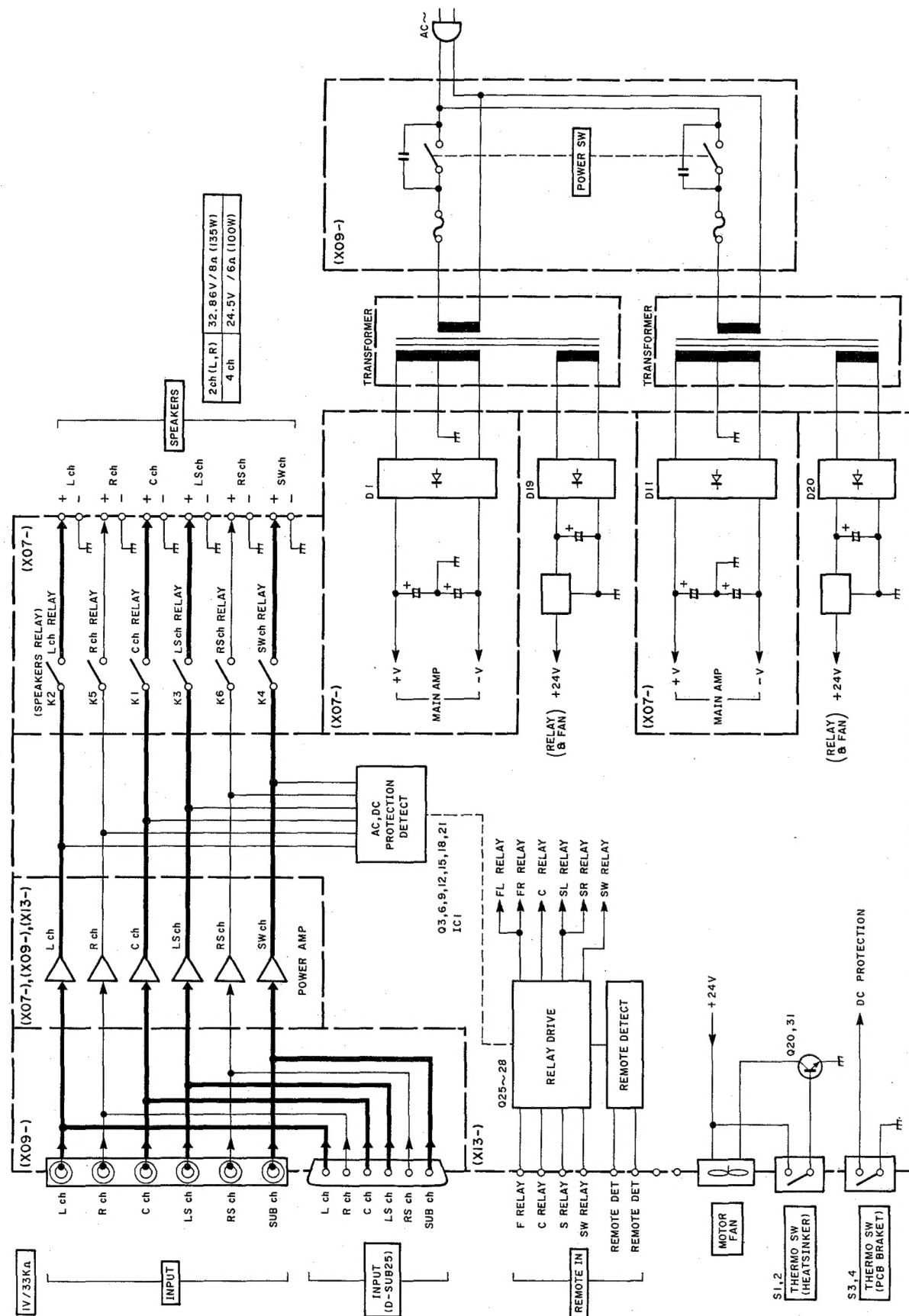




# KM-X1

# KM-X1

## BLOCK DIAGRAM



## ADJUSTMENT

No.	ITEM	INPUT SETTING	OUTPUT SETTING	PLAYER SETTING	ALIGNMENT POINT	ALIGN FOR	FIG
Unless you have some special reason otherwise, please use the following setting for each switch.							
		POWER: ON		SPEAKER: ON			
1	OFF-SET VOLTAGE	-	Connect a DC voltmeter to each channel of speaker terminal (+,-).	-	Lch : VR1 Rch : VR5 LSch : VR3 RSch : VR6 Cch : VR2 SWch : VR4 (X09-3800-10)	0V	
2	IDLE CURRENT	-	Connect a DC voltmeter between TP8 and TP10 (Lch) TP4 and TP6 (LSch) TP12 and TP14 (Cch). (X07-2750-10, A/2)	-	Lch : VR2 LSch : VR1 Cch : VR3 (X07-2750-10, A/2)	8mV	
			Connect a DC voltmeter between TP7 and TP9 (Rch) TP3 and TP5 (RSch) TP11 and TP13 (SWch). (X07-2750-10, B/2)	-	Rch : VR5 RSch : VR4 SWch : VR6 (X07-2750-10, B/2)		

## REGLAGE

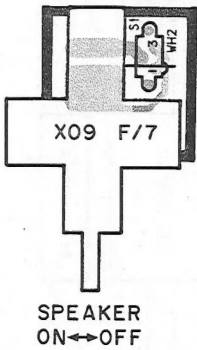
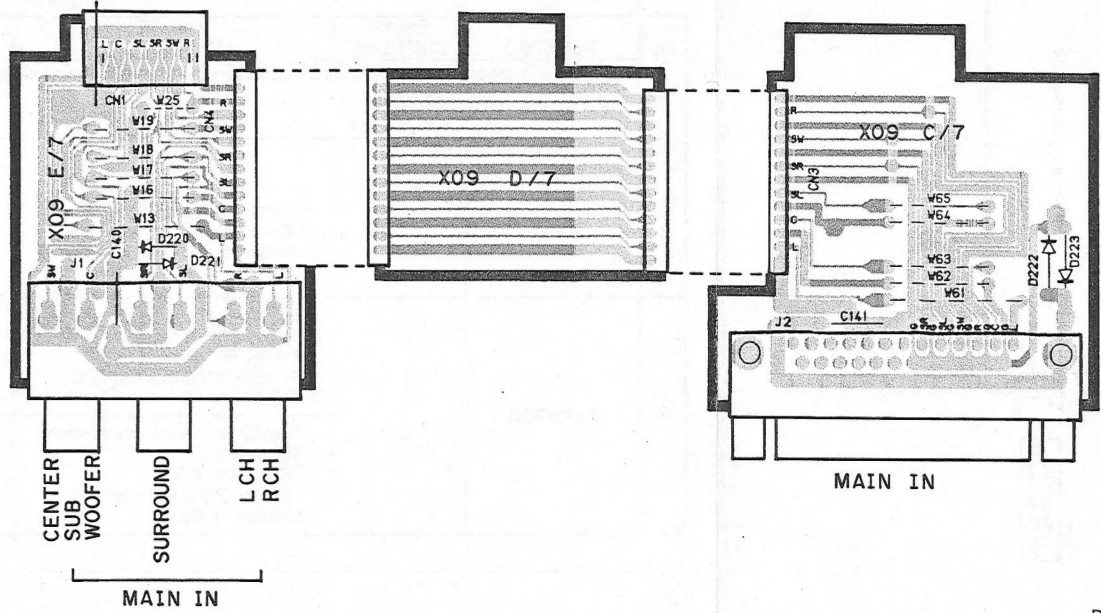
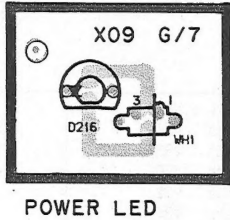
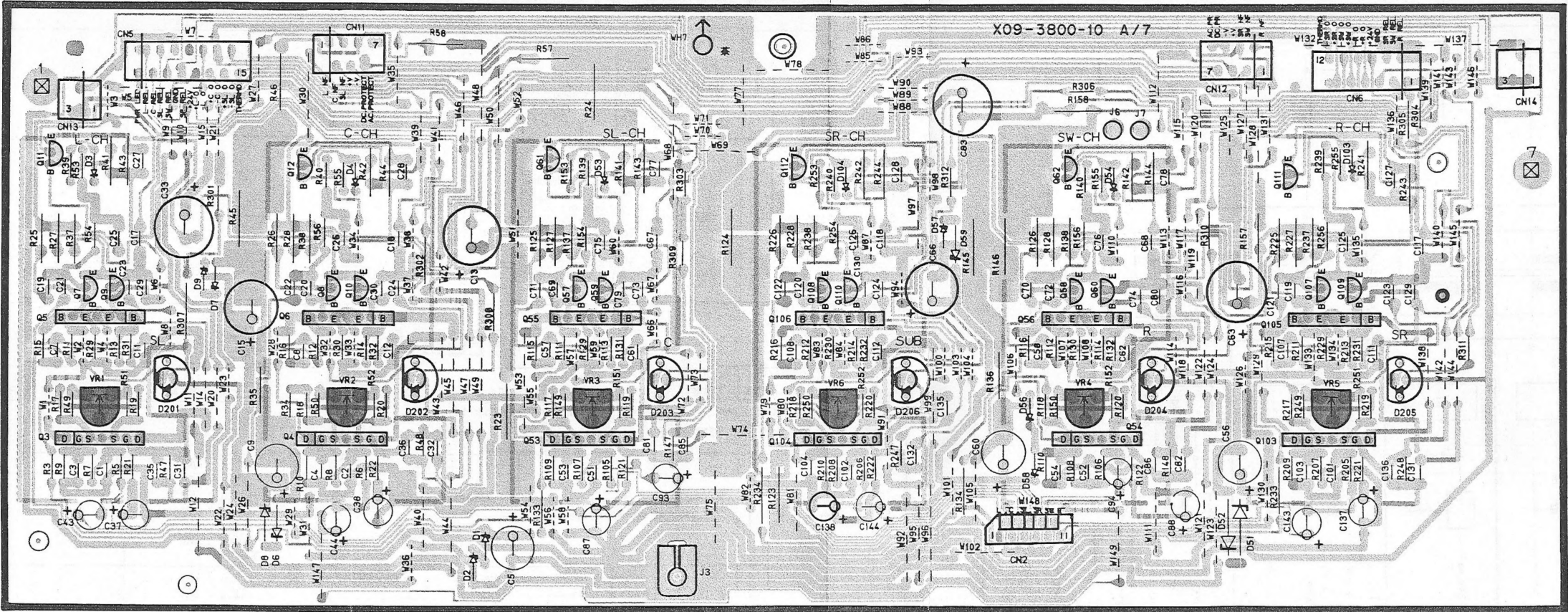
No.	ITEM	REGLAGE D'ENTREE	REGLAGE DE SORTIE	REGLAGE DU LECTEUR	POINT D'ALIGNEMENT	ALIGNEMENT POUR	FIG
A moins que l'on n'ait d'autres raisons, utiliser le réglage suivant pour chaque commutateur.							
		ALIMENTATION: ACTIVE		HAUT-PARLEUR: ACTIVE			
1	TENSION DE SUPPRESSION	-	Connecter un voltmètre CC à chaque canal de borne de haut-parleur (+,-).	-	Lch : VR1 Rch : VR5 LSch : VR3 RSch : VR6 Cch : VR2 SWch : VR4 (X09-3800-10)	0V	
2	COURANT REACTIF	-	Connecter un voltmètre CC entre TP8 et TP10 (Lch) TP4 et TP6 (LSch) TP12 et TP14 (Cch). (X07-2750-10, A/2)	-	Lch : VR2 LSch : VR1 Cch : VR3 (X07-2750-10, A/2)	8mV	
			Connecter un voltmètre CC entre TP7 et TP9 (Rch) TP3 et TP5 (RSch) TP11 et TP13 (SWch). (X07-2750-10, B/2)	-	Rch : VR5 RSch : VR4 SWch : VR6 (X07-2750-10, B/2)		

## ABGLEICH

Nr.	GEGENSTAND	EINGABE EINSTELLUNG	AUSGABE EINSTELLUNG	PLAYER EINSTELLUNG	AUSRICHTUNGSPUNKT	AUSRICHTEN FÜR	ABB
Außer wenn Sie einen besonderen anderen Grund haben, verwenden Sie bitte die folgenden Einstellungen für jeden Schalter.							
		STROMVER-SORGUNG: EIN		LAUTSPRECHER: EIN			
1	OFF-SET-SPANNUNG	-	Schließen Sie eine GS-Spannungsmesser an jedem Kanal der Lautsprecherbuchse an (+,-).	-	Lch : VR1 Rch : VR5 LSch : VR3 RSch : VR6 Cch : VR2 SWch : VR4 (X09-3800-10)	0V	
2	BLINDSTROM	-	Einen GS-Spannungsmesser zwischen TP8 und TP10 (Lch) TP4 und TP6 (LSch) TP12 und TP14 (Cch) anschließen. (X07-2750-10, A/2)	-	Lch : VR2 LSch : VR1 Cch : VR3 (X07-2750-10, A/2)	8mV	
			Einen GS-Spannungsmesser zwischen TP7 und TP9 (Rch) TP3 und TP5 (RSch) TP11 und TP13 (SWch) anschließen. (X07-2750-10, B/2)	-	Rch : VR5 RSch : VR4 SWch : VR6 (X07-2750-10, B/2)		



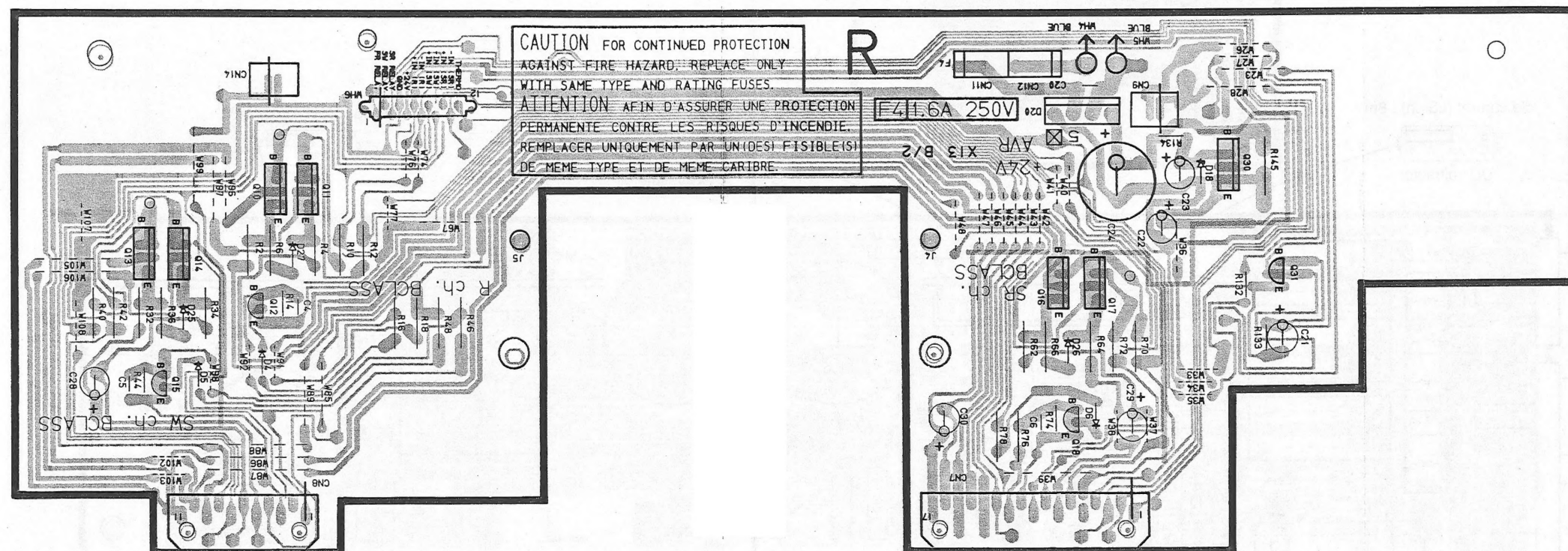
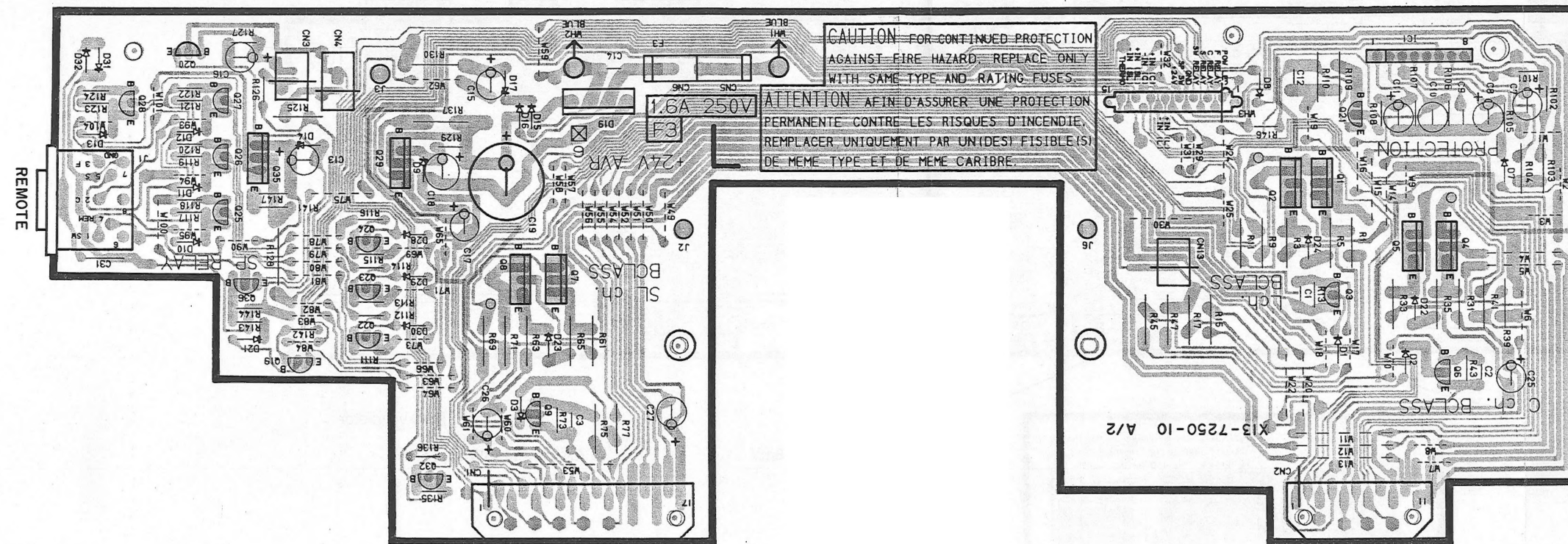
PC BOARD (Component side view)



Refer to the schematic diagram for the values of registers and capacitors.



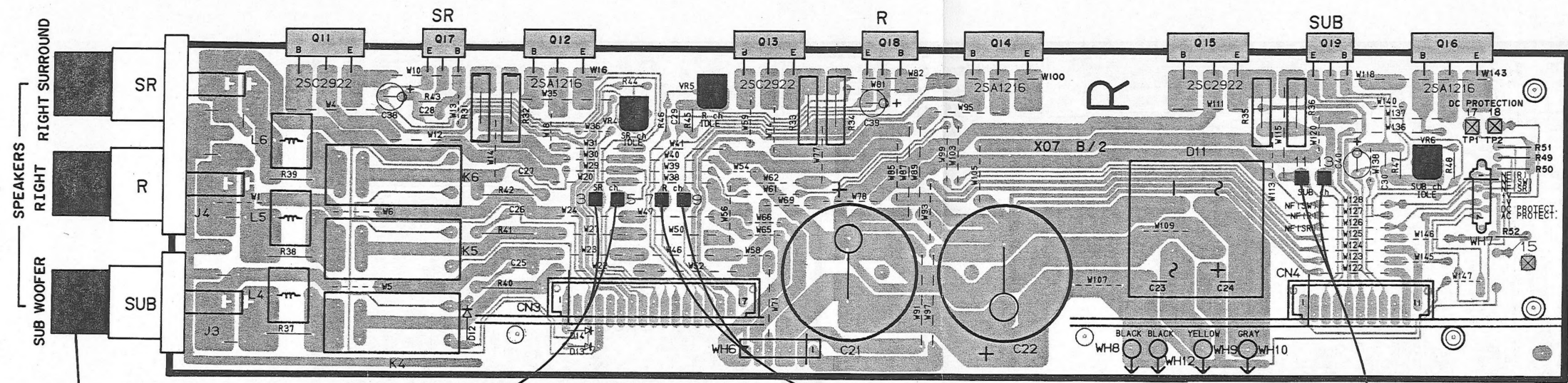
# PC BOARD (Component side view)



Refer to the schematic diagram for the values of registers and capacitors.



# PC BOARD (Component side view)



DC voltmeter

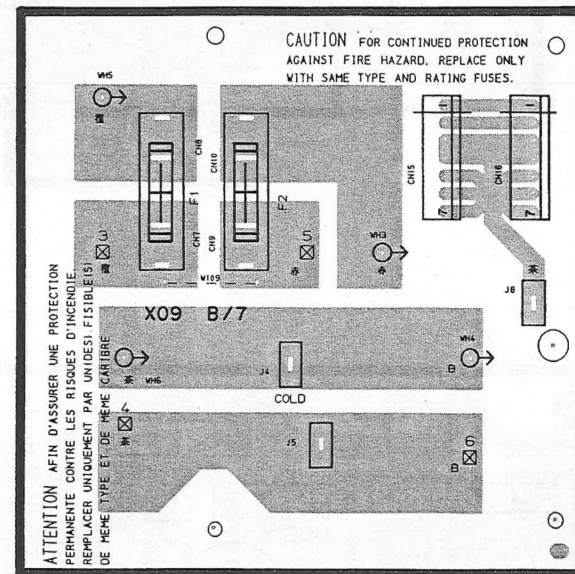
Idle current (RS ch) : 8mV

Off-set voltage : 0V

DC voltmeter

Idle current (LS ch) : 8mV

DC voltmeter

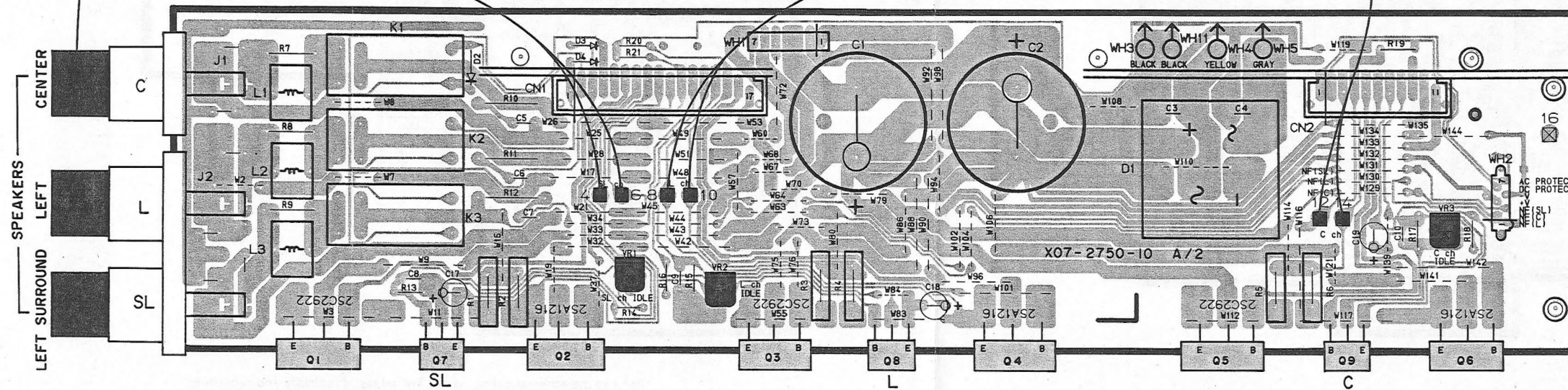


DC voltmeter

Idle current (R ch) : 8mV

DC voltmeter

Idle current (SW ch) : 8mV



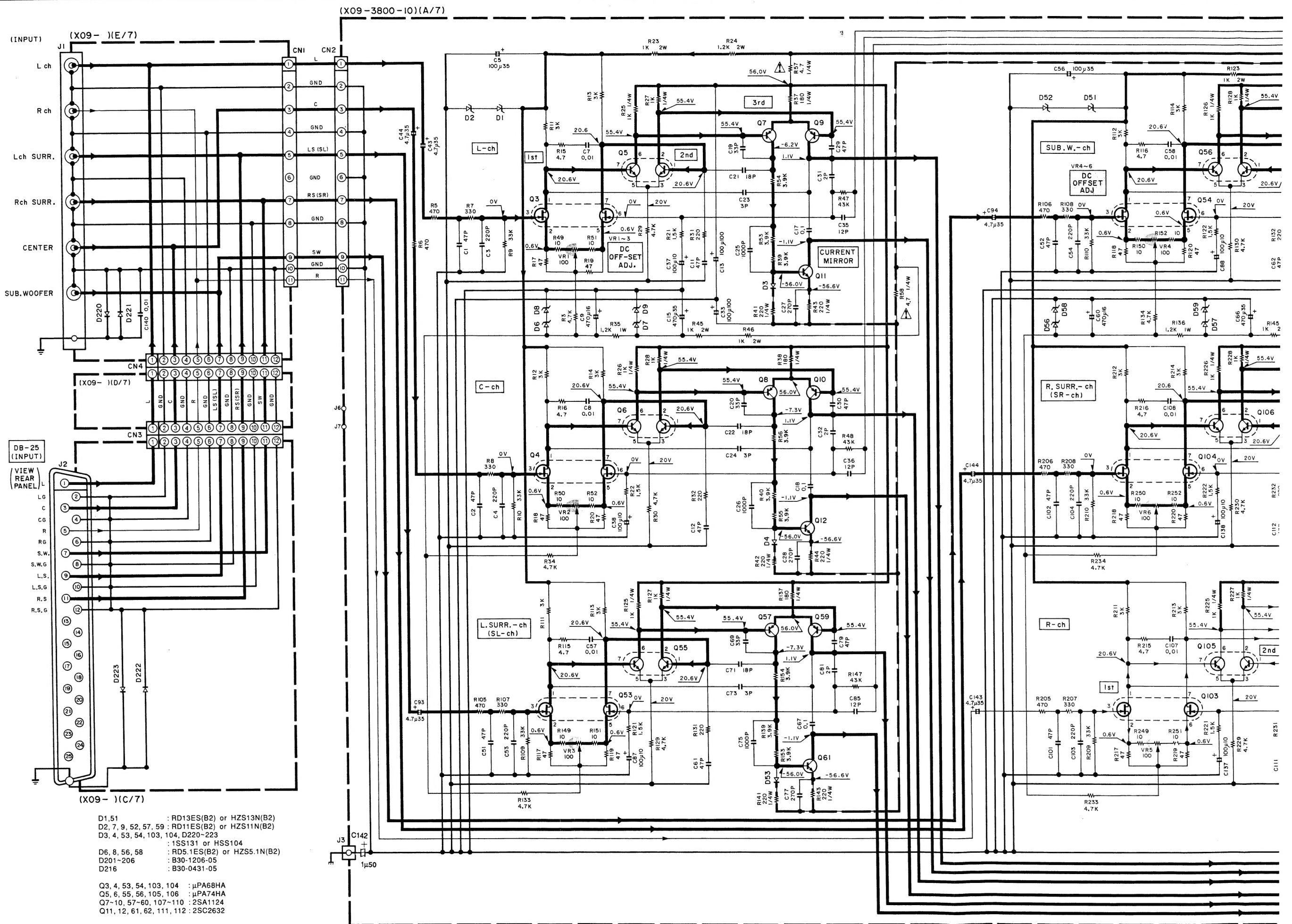
Idle current (L ch) : 8mV

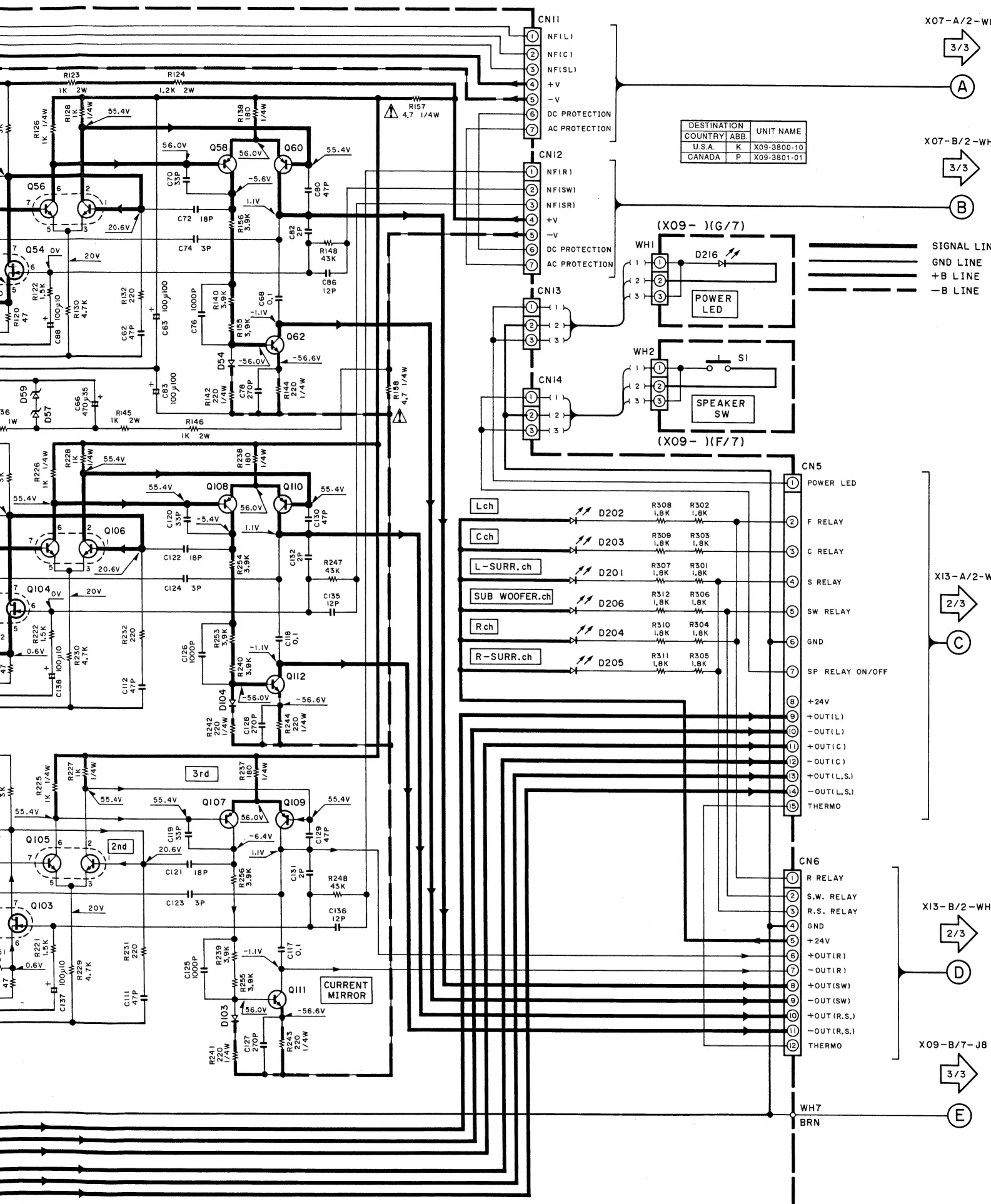
DC voltmeter

Idle current (C ch) : 8mV

DC voltmeter







X07-A/2-WH2  
3/3  
A

X07-B/2-WH7  
3/3  
B

(X09-)(G/7)  
WH1  
1 2 3  
2 1 2 3  
3 1 2 3  
POWER LED

(X09-)(F/7)  
WH2  
1 2 3  
2 1 2 3  
3 1 2 3  
SPEAKER SW

X13-A/2-WH3  
2/3  
C

X13-B/2-WH6  
2/3  
D

X09-B/7-J8  
3/3  
E

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out. (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

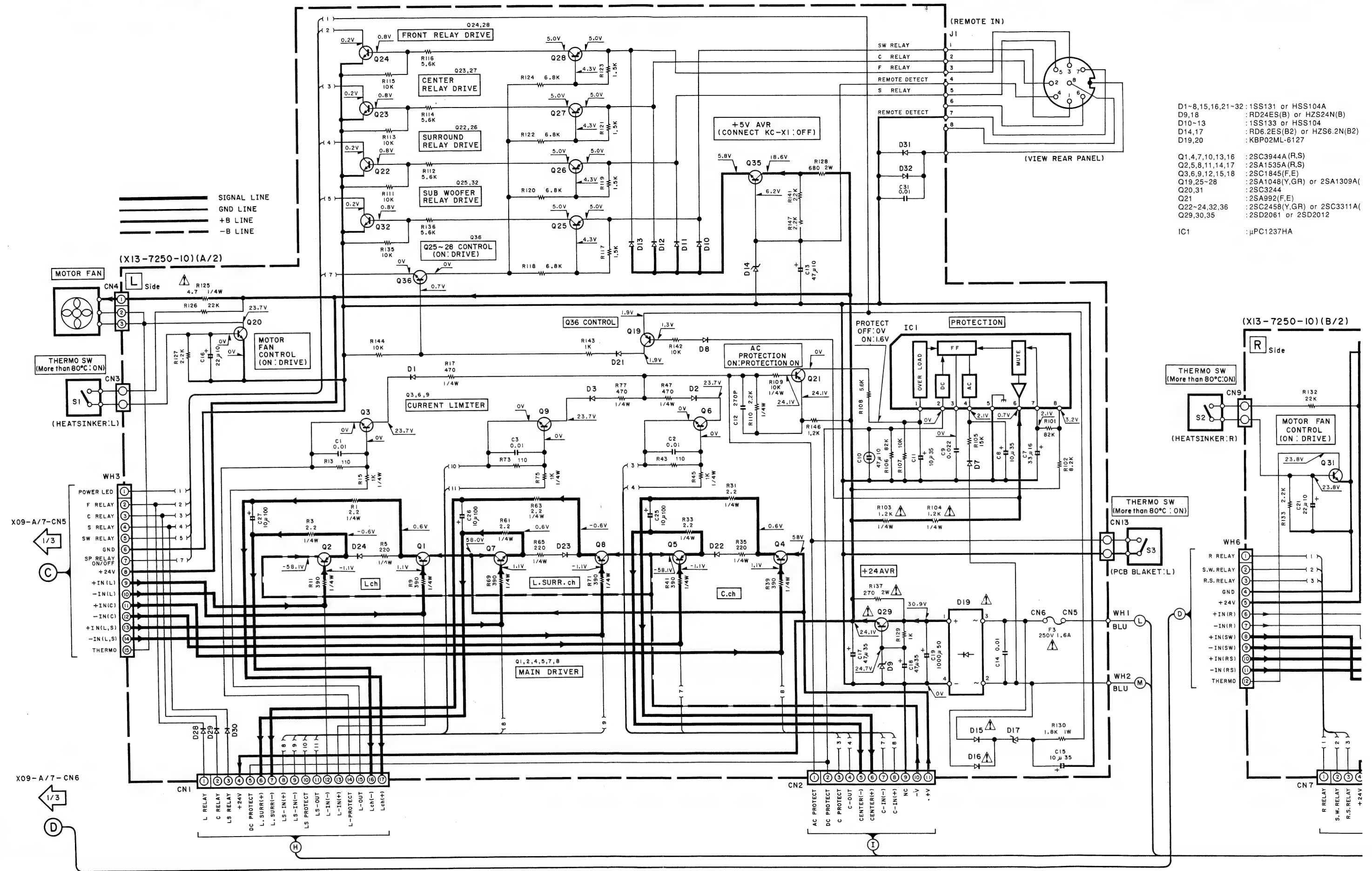
DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instrument de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanden die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

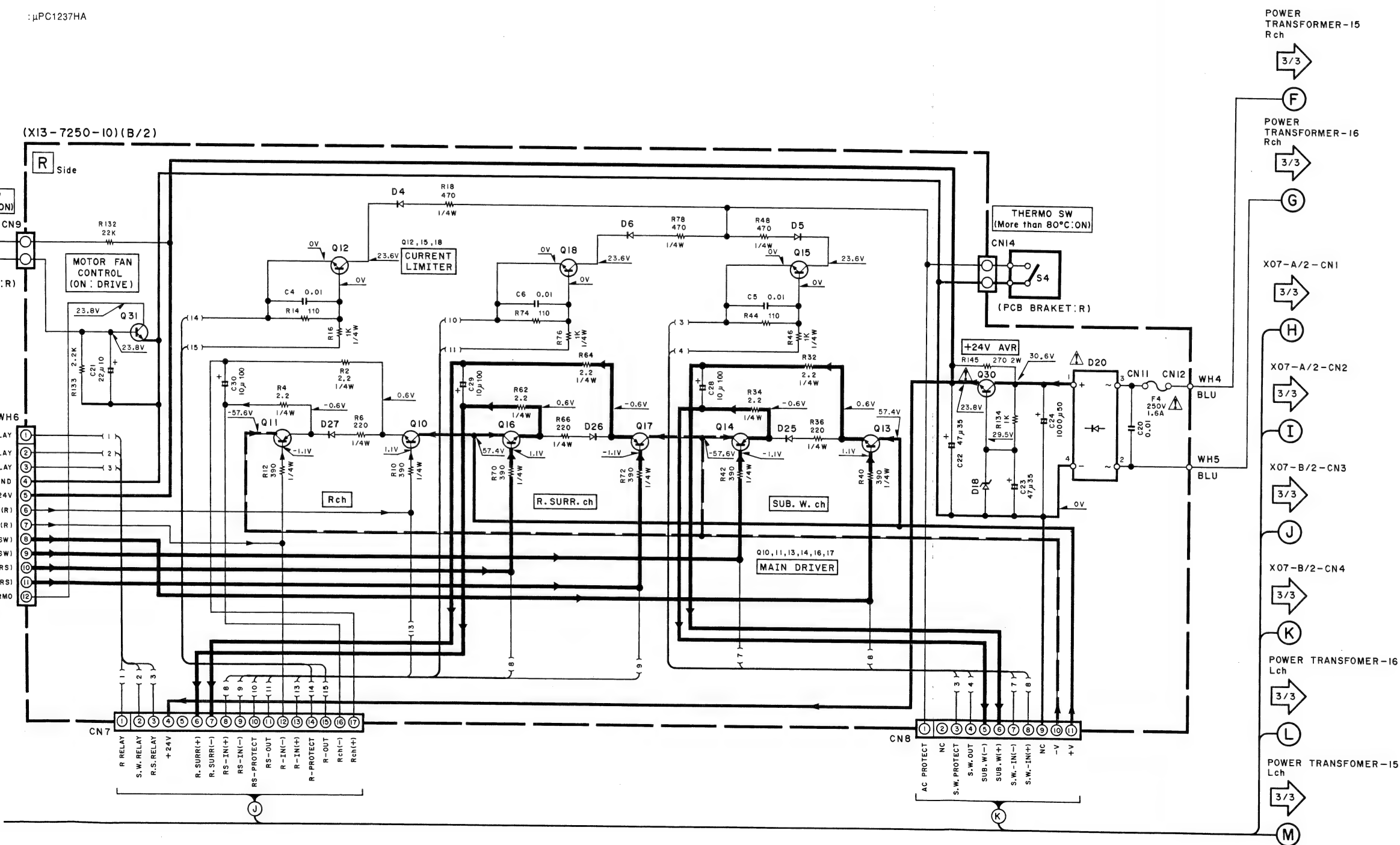
- 2SA1124
- 2SA992
- 2SC1845
- 2SC2632
- 2SC3244
- 2SC2922LB
- 2SA1048
- 2SC2458
- 2SA1216LB
- 2SA1535A
- 2SC3944A
- 2SD2061
- 2SA1309A
- 2SC3311A
- 2SD2012
- UPA68HA
- UPA74HA
- UPC1237HA





- D1-8,15,16,21-32: 1SS131 or HSS104A  
D9,18: RD24ES(B) or HZS24N(B)  
D10-13: 1SS133 or HSS104  
D14,17: RD6.2ES(B2) or HZS6.2N(B2)  
D19,20: KBP02ML-6127
- Q1,4,7,10,13,16: 2SC3944A(R,S)  
Q2,5,8,11,14,17: 2SA1535A(R,S)  
Q3,6,9,12,15,18: 2SC1845(F,E)  
Q19,25-28: 2SA1048(Y,GR) or 2SA1309A  
Q20,31: 2SC3244  
Q21: 2SA992(F,E)  
Q22-24,32,36: 2SC2458(Y,GR) or 2SC3311A  
Q29,30,35: 2SD2061 or 2SD2012
- IC1:  $\mu$ PC1237HA

1-32: 1SS131 or HSS104A  
       RD24ES(B) or HZS24N(B)  
       1SS133 or HSS104  
       RD6.2ES(B2) or HZS6.2N(B2)  
       KBP02ML-6127  
  
 16: 2SC3944A (R,S)  
 17: 2SA1535A (R,S)  
 18: 2SC1845 (F,E)  
       2SA1048 (Y,GR) or 2SA1309A (Q,R)  
       2SC3244  
       2SA992 (F,E)  
 6: 2SC2458 (Y,GR) or 2SC3311A (Q,R)  
       2SD2061 or 2SD2012  
  
       μPC1237HA



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X09-A/7-CN12

1/3

B

X13-B/2-CN7

2/3

J

X13-B/2-CN8

2/3

K

X13-A/2-CN1

2/3

H

X13-B/2-WH4

2/3

F

X13-B/2-WH5

2/3

G

X09-A/7-CN11

1/3

A

X13-A/2-WH1

2/3

L

X13-A/2-WH2

2/3

M

X13-A/2-CN2

2/3

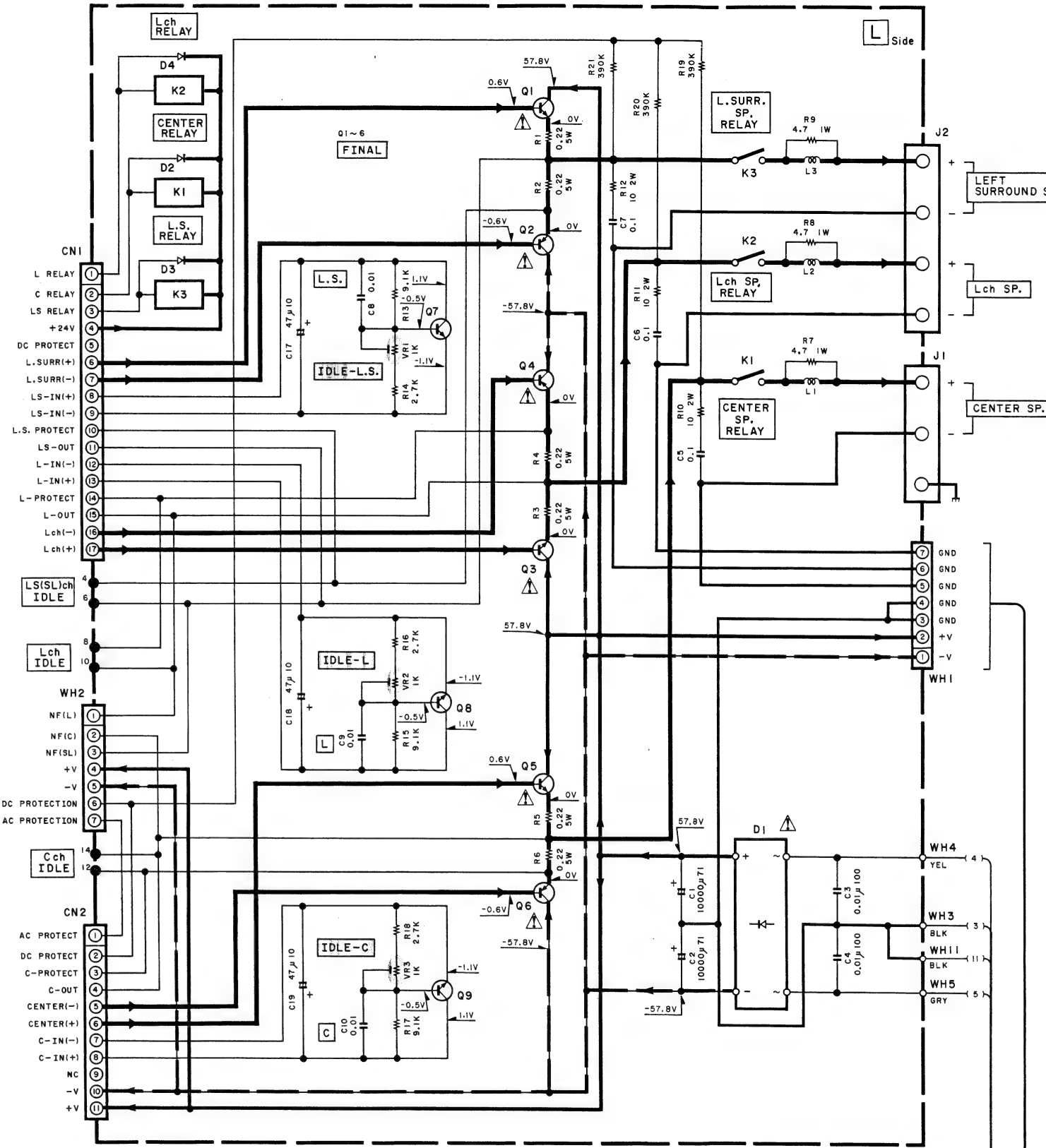
I

X09-A/7-WH7

1/3

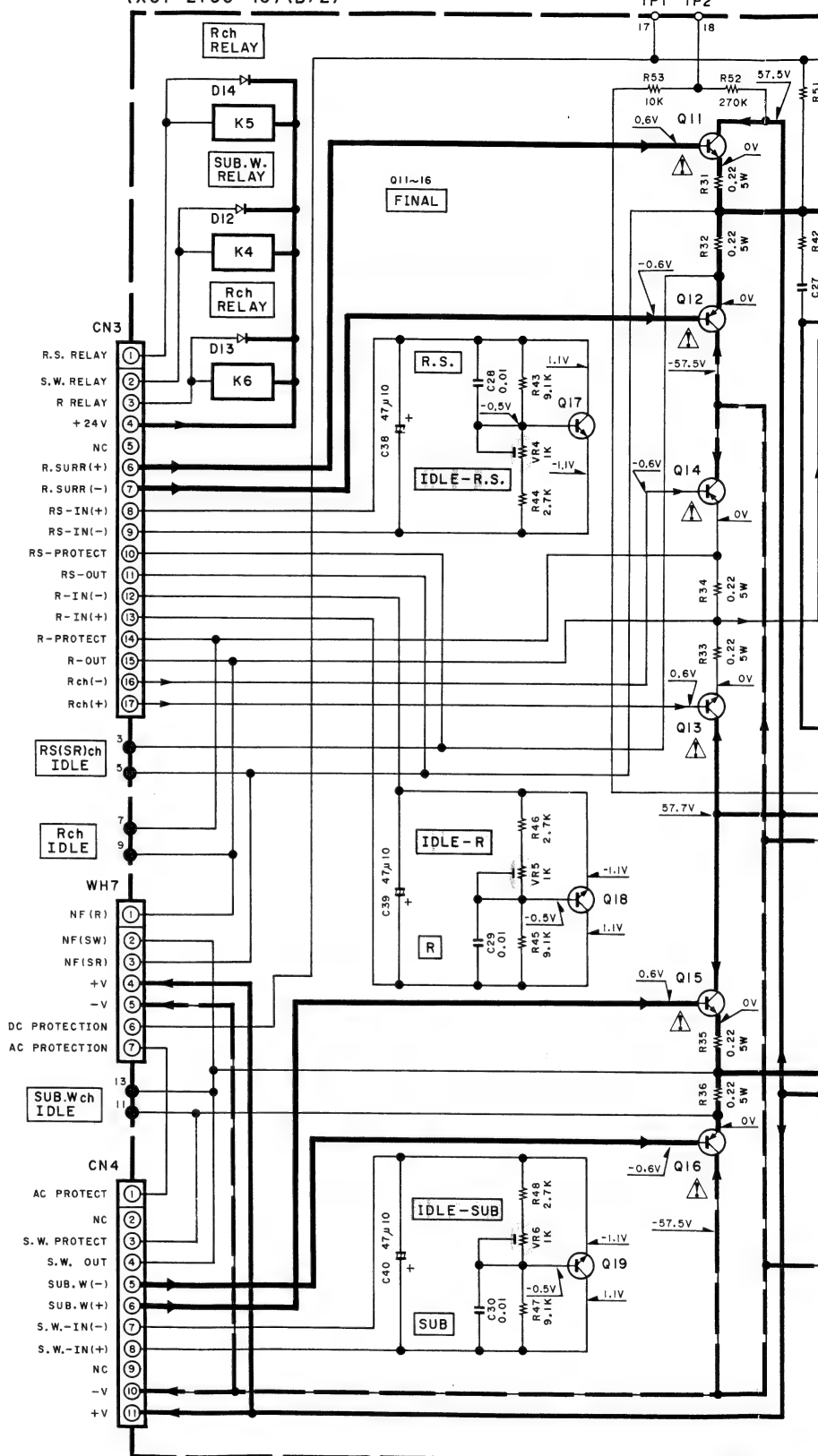
E

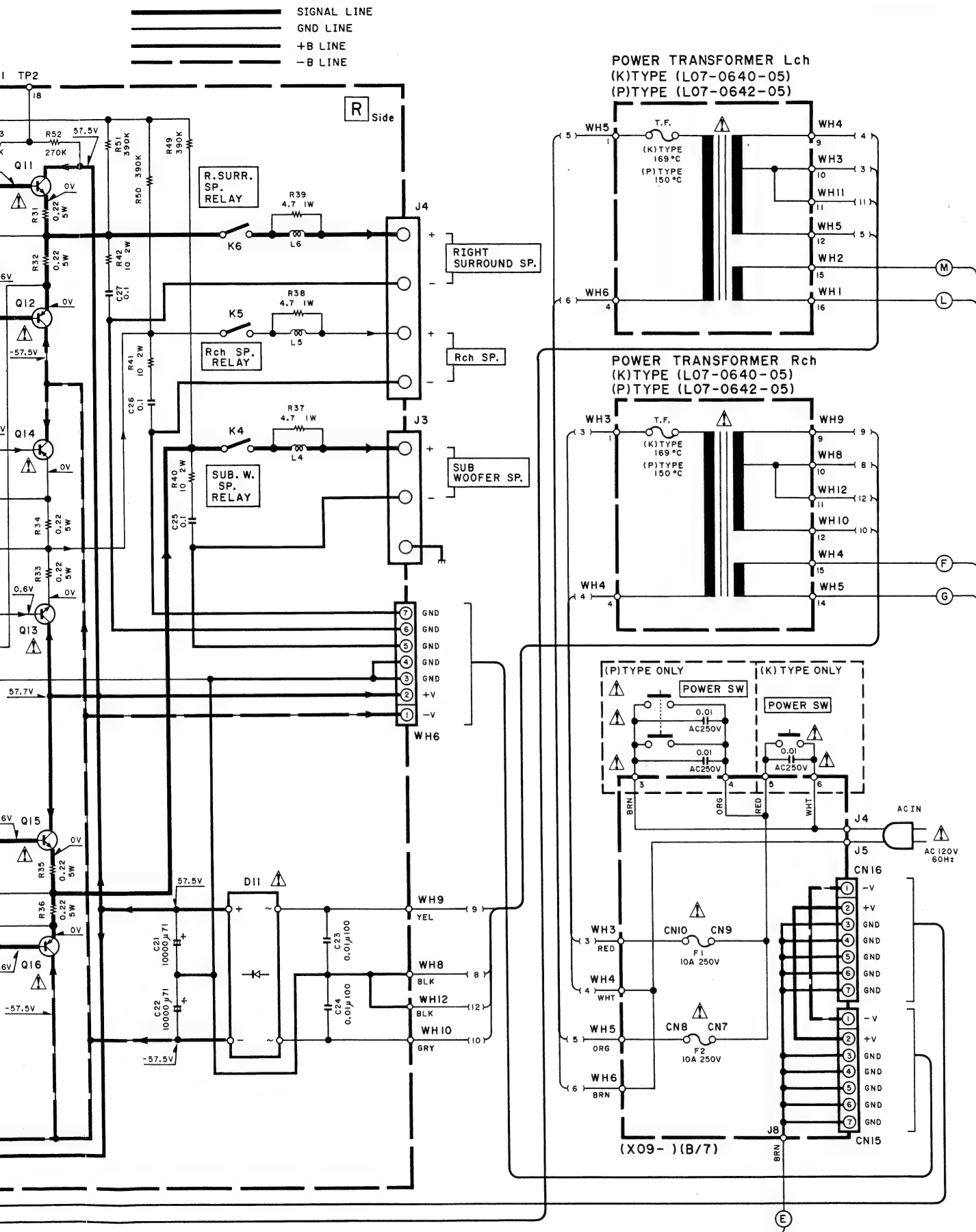
(X07-2750-10) (A/2)



D1,11 : D5FB20\*1  
D2-4,12-14 : HSS104 or 1SS133  
Q1,3,5,11,13,15 : 2SC2922LB(P,G)  
Q2,4,6,12,14,16 : 2SA1216LB(P,G)  
Q7-9,17-19 : 2SC4137F19 (V,W)

(X07-2750-10) (B/2)





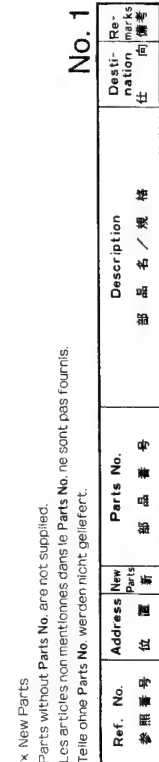
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✕ New Parts  
 Parts without Parts No. are not supplied.  
 Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
 Teile ohne Parts No. werden nicht geliefert.

No. 1

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
<b>KM-X1</b>					
601	1B	*	A01-3004-01	METALLIC CABINET	
602	3A	*	A29-0328-12	PANEL ASSY	
603	3A	*	A60-0342-22	PANEL ASSY	
604	3B	*	B01-0497-12	PANEL GSCUTCHON ASSY	
605	3A	*	B11-0215-04	INDICATOR	
606	3A	*	B12-0219-04	INDICATOR	
607	3A	*	B43-0287-04	KENWOOD BADGE	
-			B46-0092-23	WARRANTY CARD	K
-			B46-0121-23	WARRANTY CARD	P
-			B46-0197-00	QUESTIONNAIRE CARD	P
-		*	B60-1089-00	INSTRUCTION MANUAL(ENGLISH)	
-		*	B60-1090-00	INSTRUCTION MANUAL(FRENCH)	P
-			C01-1439-05	FILM 0.01UF 250VAC	
611	1D	*	E30-0978-05	AC POWER CORD	
612	1D	*	E35-0551-05	FLAT CABLE	
FANM	1D		F09-0081-05	FAN	
615	3A		G11-0191-04	SOFT TAPE (90X5X2.5)	
-		*	H10-5432-02	POLYSTYRENE FRAMED FIXTURE	
-		*	H10-5433-02	POLYSTYRENE FRAMED FIXTURE	
-		*	H25-0232-04	PROTECTION BAG (235X350X0.03)	
-		*	H25-0319-04	PROTECTION BAG (650X450X0.03)	
-		*	H50-0530-04	ITEM CARTON CASE	
620	3B, 3C		J02-1002-05	FOOT	
621	2B		J19-3324-15	UNIT HOLDER	
625	1D		J42-0083-05	POWER CORD BUSHING	
-			J61-0307-05	WIRE BAND	
626	2A, 3B	*	K29-5642-14	KNOB(POWER, SPEAKER)	
627	1B, 1C	*	L07-0640-05	POWER TRANSFORMER	K
627	1B, 1C	*	L07-0642-05	POWER TRANSFORMER	P
A			N09-2907-05	SENS (TAPITITE SCREW)(3X14)	
B			N09-0333-05	TAPPING SCREW (3X12)	
C			N09-1445-05	SET SCREW	
D		*	N09-2979-05	HEXAGON HEAD BOLT	
E		*	N35-3006-45	BINDING HEAD MACHINE SCREW	
F			N89-3008-45	BINDING HEAD TAPITITE SCREW	
G			N89-3008-46	BINDING HEAD TAPITITE SCREW	
H			N89-4008-45	BINDING HEAD TAPITITE SCREW	
J			N89-3023-45	BINDING HEAD TAPITITE SCREW	
630	2B		S40-1094-05	PUSH SWITCH (POWER TYPE)	K
630	2B	*	S68-0029-05	PUSH SWITCH (POWER TYPE)	P
<b>POWER AMPLIFIER UNIT (X07-2750-10)</b>					
C1, 2		*	C90-3478-05	ELECTRØ 10000UF 71WV	
C3, 4		*	C09HP2A103J	MYLAR	
C5, 7, 10		*	C45FSL1H470J	CERAMIC	
C17 -19		*	C90-3362-05	ELECTRØ 47UF 10WV	
C21, 22		*	C90-3478-05	ELECTRØ 10000UF 71WV	

## PARTS LIST

KM-X1

L:Scandinavia  
 YP(X:Far East, Hawaii)  
 YAA(F:Europe)  
 KUSA  
 T:England  
 X:Australia  
 P:Canada  
 E:Europe  
 M:Other Areas

△ indicates safety critical components

✕ New Parts  
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No. 3

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
C25, 26			CK45FB1H102K	CERAMIC	
C27, 28			CC45FSL1H271J	CERAMIC	
C29, 30			CC45FSL1H470J	CERAMIC	
C31, 32		*	CC45FSL1H020C	ELECTRØ 100UF 100WV	
C33			C90-3444-05	ELECTRØ 100UF 100WV	
C35, 36			CC45FSL1H120J	CERAMIC	
C37, 38			CE04KW1A10M	ELECTRØ 100UF 10WV	
C43, 44			CE04KW1V47M	ELECTRØ 4.7UF 35WV	
C51, 52			CC45FSL1H470J	CERAMIC	
C53, 54			CC45FSL1H221J	CERAMIC	
C56			C90-3397-05	ELECTRØ 100UF 35WV	
C57, 58		*	CF92FV1H103J	MF 0.010UF J	
C60		*	C90-3377-05	ELECTRØ 470UF 16WV	
C61, 62		*	CC45FSL1H470J	CERAMIC	
C63		*	C90-3444-05	ELECTRØ 100UF 100WV	
C66		*	C90-3400-05	ELECTRØ 470UF 35WV	
C67, 68			CF92FV1H104J	MF 0.10UF J	
C69, 70			CC45FSL1H330J	CERAMIC	
C71, 72			CC45FSL1H180J	CERAMIC	
C73, 74			CC45FSL1H030C	CERAMIC	
C75, 76			CC45FB1H102K	CERAMIC	
C77, 78			CC45FSL1H271J	CERAMIC	
C79, 80			CC45FSL1H470J	CERAMIC	
C81, 82			CC45FSL1H020C	CERAMIC	
C83		*	C90-3444-05	ELECTRØ 100UF 100WV	
C85, 86			CC45FSL1H120J	CERAMIC	
C87, 88			CE04KW1A10M	ELECTRØ 100UF 10WV	
C93, 94			CE04KW1V47M	ELECTRØ 4.7UF 35WV	
C101, 102			CC45FSL1H470J	CERAMIC	
C103, 104			CC45FSL1H221J	CERAMIC	
C107, 108			CF92FV1H103J	MF 0.010UF J	
C111, 112			CF92FV1H104J	MF 0.10UF J	
C113, 114			CC45FSL1H330J	CERAMIC	
C119, 120			CC45FSL1H180J	CERAMIC	
C121, 122			CC45FSL1H160J	CERAMIC	
C123, 124			CC45FSL1H030C	CERAMIC	
C125, 126			CC45FB1H102K	ELECTRØ 100UF 10WV	
C127, 128			CC45FSL1H271J	CERAMIC	
C129, 130			CC45FSL1H470J	CERAMIC	
C131, 132			CC45FSL1H020C	CERAMIC	
C135, 136			CC45FSL1H120J	CERAMIC	
C137, 138			CE04KW1A10M	ELECTRØ 100UF 10WV	
C140, 141			C91-0769-05	CERAMIC 0.01UF K	
C142			CE04KW1H010M	ELECTRØ 1.0UF 50WV	
C143, 144			CE04KW1V47M	ELECTRØ 4.7UF 35WV	
J1	1D	*	E63-0074-05	PHONE JACK(MAIN IN)	
J2	1D	*	E58-0003-05	RECTANGULAR RECEPTACLE(MAIN IN)	
F1, 2		*	F05-1037-05	FUSE (250V 10A)	
CN7 -10			J13-0041-05	FUSE CLIP	
J6, 7			J11-0098-05	WIRE CLAMPER	
R23			RS14DB3D102J	FL-PROOF RS 1.0K J 2W	
R24			RS14DB3D102J	FL-PROOF RS 1.2K J 2W	
R25 -28			RD14NB2E102J	RD 1.0K J 1/4W	

△

✕ New Parts  
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No. 4

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
R35			RS14DB3A122J	FL-PROOF RS 1.2K J 1W	
R37, 38			RD14NB2E181J	RD 180 J 1/4W	
R41 -44			RD14NB2E221J	RD 220 J 1/4W	
R45, 46			RS14DB3D102J	FL-PROOF RS 1.0K J 1/4W	
R47, 48			RD14NB2E47J	RD 4.7 J 1/4W	
R123			RS14DB3D102J	FL-PROOF RS 1.0K J 2W	
R124			RS14DB3D102J	FL-PROOF RS 1.2K J 2W	
R125-128			RS14DB3A122J	FL-PROOF RS 1.2K J 1W	
R137, 138			RD14NB2E181J	RD 180 J 1/4W	
R141-144			RD14NB2E221J	RD 220 J 1/4W	
R145, 146			RS14DB3D102J	FL-PROOF RS 1.0K J 2W	
R155, 158			RD14NB2E47J	RD 4.7 J 1/4W	
R225-228			RD14NB2E102J	RD 1.0K J 1/4W	
R237, 238			RD14NB2E181J	RD 180 J 1/4W	
R241-244			RD14NB2E221J	RD 220 J 1/4W	
VR1 -6		*	R12-5085-05	TRIMMING PØT.(DC OFF-SET)	
S1	3B	*	S68-0030-05	PUSH SWITCH(SPEAKER SW)	
D1			HZS13N(B2)	ZENER DIØDE	
D2			RD13ES(B2)	ZENER DIØDE	
D3			RD11ES(B2)	ZENER DIØDE	
D3, 4			HSS104	DIØDE	
D6			ISS133	DIØDE	
D6			HZS5-1N(B2)	ZENER DIØDE	
D6			RDS-1ES(B2)	ZENER DIØDE	
D7			HZS13N(B2)	ZENER DIØDE	
D7			RD11ES(B2)	ZENER DIØDE	
D8			HZS5-1N(B2)	ZENER DIØDE	
D8			RD5-1ES(B2)	ZENER DIØDE	
D9			HZS11N(B2)	ZENER DIØDE	
D9			RD11ES(B2)	ZENER DIØDE	
D51			HZS13N(B2)	ZENER DIØDE	
D51			RD13ES(B2)	ZENER DIØDE	
D52			HZS11N(B2)	ZENER DIØDE	
D53, 54			RD11ES(B2)	ZENER DIØDE	
D53, 54			HSS104	DIØDE	
D56			HZS5-1N(B2)	ZENER DIØDE	
D56			RD5-1ES(B2)	ZENER DIØDE	
D57			HZS11N(B2)	ZENER DIØDE	
D57			RD11ES(B2)	ZENER DIØDE	
D58			HZS5-1N(B2)	ZENER DIØDE	
D58			RD5-1ES(B2)	ZENER DIØDE	
D59			HZS11N(B2)	ZENER DIØDE	
D59			RD11ES(B2)	ZENER DIØDE	
D103, 104			HSS104	DIØDE	
D220-223			ISS133	DIØDE	
Q3, 4			HSS104	DIØDE	
Q5, 6		*	UPA468A	DUAL FET	
Q7 -10			2SA1124	DUAL TRANSISTØR	

## PARTS LIST

KM-X1

△ indicates safety critical components



## PARTS LIST

No. 6

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向
R128			RS14KB3D681J	FL-PROOF RS 680	J 2W
R130			RS14KB3A192J	FL-PROOF RS 1.8K	J 1W
R137			RS14KB3D271J	FL-PROOF RS 270	J 2W
R145			RS14KB3D271J	FL-PROOF RS 270	J 2W
△ S1 -4	1A, 1B		S79-0004-05	THERMAL SWITCH	
D1 -8			HSS104A	DIODE	
D1 -8			1SS131	DIODE	
D9			HZS24N(B)	ZENER DIODE	
D9			RD24ES(B)	ZENER DIODE	
D10 -13			HSS104	DIODE	
D10 -13			1SS133	DIODE	
D14			HZS6-2N(B2)	ZENER DIODE	
D14			RD6-2ES(B2)	ZENER DIODE	
D15 ,16			HSS104A	DIODE	
D15 ,16			1SS131	DIODE	
D17			HZS6-2N(B2)	ZENER DIODE	
D17			RD6-2ES(B2)	ZENER DIODE	
D18			HZS24N(B)	ZENER DIODE	
D18			RD24ES(B)	ZENER DIODE	
D19 ,20			KBP02ML-6127	DIODE	
△ D21 -32			HSS104A	DIODE	
D21 -32			1SS131	DIODE	
IC1		*	UPC1237HA	IC(POWER AMP)	
Q1		*	2SC3944A(R,S)	TRANSISTOR	
Q2		*	2SA1535A(R,S)	TRANSISTOR	
Q3		*	2SC1845(F,E)	TRANSISTOR	
Q4		*	2SC3944A(R,S)	TRANSISTOR	
Q5		*	2SA1535A(R,S)	TRANSISTOR	
Q6		*	2SC1845(F,E)	TRANSISTOR	
Q7		*	2SC3944A(R,S)	TRANSISTOR	
Q8		*	2SA1535A(R,S)	TRANSISTOR	
Q9		*	2SC1845(F,E)	TRANSISTOR	
Q10		*	2SC3944A(R,S)	TRANSISTOR	
Q11		*	2SA1535A(R,S)	TRANSISTOR	
Q12		*	2SC1845(F,E)	TRANSISTOR	
Q13		*	2SC3944A(R,S)	TRANSISTOR	
Q14		*	2SA1535A(R,S)	TRANSISTOR	
Q15		*	2SC1845(F,E)	TRANSISTOR	
Q16		*	2SC3944A(R,S)	TRANSISTOR	
Q17		*	2SA1535A(R,S)	TRANSISTOR	
Q18		*	2SC1845(F,E)	TRANSISTOR	
Q19		*	2SA1048(Y,OR)	TRANSISTOR	
Q20		*	2SA1309A(Q,R)	TRANSISTOR	
Q21		*	2SC2244	TRANSISTOR	
Q22 -24		*	2SA992(F,E)	TRANSISTOR	
Q22 -24		*	2SC2458(Y,OR)	TRANSISTOR	
Q22 -24		*	2SC3511A(Q,R)	TRANSISTOR	
Q25 -28		*	2SA1368(Y,OR)	TRANSISTOR	
Q25 -28		*	2SA1309A(Q,R)	TRANSISTOR	
Q29 ,30		*	2SC2012	TRANSISTOR	
Q29 ,30		*	2SC2061	TRANSISTOR	
Q31		*	2SC3244	TRANSISTOR	
Q32		*	2SC2458(Y,OR)	TRANSISTOR	
Q32		*	2SC3511A(Q,R)	TRANSISTOR	

LS:Scandinavia  
Y:PX(Far East, Hawaii)  
Y:AFES(Europe)

K:USA  
T:England  
X:Australia

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M:Other Areas

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No. 5

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向
Q11 ,12			2SC2632	TRANSISTOR	
Q53 ,54			UPA68HA	DUAL EET	
Q55 ,56			UPA74HA	DUAL TRANSISTOR	
Q57 -60			2SA1124	TRANSISTOR	
Q61 ,62			2SC2632	TRANSISTOR	
Q103,104			UPA68HA	DUAL EET	
Q105,106		*	UPA74HA	DUAL TRANSISTOR	
Q107-110			2SA1124	TRANSISTOR	
Q111,112			2SC2632	TRANSISTOR	
SUB-CIRCUIT UNIT (X13-7250-10)					
C1 -6			CK45FF1H103Z	CERAMIC	0.010UF Z
C7			CE04KM1C330M	ELECTRO	33UF 16WV
C8			CE04KM1V130M	ELECTRO	10UF 35WV
C9			CK45FF1H223Z	CERAMIC	0.022UF Z
C10			CE04HW1A470M	NP-ELEC	47UF 10WV
C11			CE04KM1V220M	ELECTRO	10UF 35WV
C12			CC45FSL1H271J	CERAMIC	270PF J
C13		*	C90-3362-05	ELECTRO	47UF 10WV
C14			CK45FF1H103Z	CERAMIC	0.010UF Z
C15		*	C90-3393-05	ELECTRO	10UF 35WV
C16			CE04KM1A220M	ELECTRO	22UF 10WV
C17 ,18		*	C90-3394-05	ELECTRO	47UF 35WV
C19			CE04KM1H103M	ELECTRO	1000UF 50WV
C20			CK45FF1H223Z	CERAMIC	0.010UF Z
C21			CE04KM1A220M	ELECTRO	22UF 10WV
C22 ,23		*	C90-3396-05	ELECTRO	47UF 35WV
C24			CE04KM1H102M	ELECTRO	1000UF 50WV
C25 -30			CE04KM2A100M	ELECTRO	10UF 100WV
C31			C91-0769-05	CERAMIC	0.01UF K
J1	1B		E06-0806-05	CYLINDRICAL RECEPTACLE(REMOTE)	
F3 ,4			F05-1628-05	FUSE (UL)	(250V 1.6A)
CN5 ,6			J13-0075-05	FUSE CLIP	
CN11,12			J13-0075-05	FUSE CLIP	
J2 -6			J11-0098-05	WIRE CLAMPER	
R1 -4			RD14NB2E2R2J	RD	2-2 J 1/4W
R5 ,6			RD14NB2E221J	RD	220 J 1/4W
R9 -12			RD14NB2E391J	RD	390 J 1/4W
R15 ,16			RD14NB2E102J	RD	1K J 1/4W
R17 ,18			RD14NB2E471J	RD	470 J 1/4W
R31 -34			RD14NB2E2R2J	RD	2-2 J 1/4W
R35 ,36			RD14NB2E221J	RD	220 J 1/4W
R39 ,42			RD14NB2E391J	RD	390 J 1/4W
R45 ,46			RD14NB2E102J	RD	1K J 1/4W
R47 ,48			RD14NB2E471J	RD	470 J 1/4W
R61 -64			RD14NB2E2R2J	RD	2-2 J 1/4W
R65 ,66			RD14NB2E221J	RD	220 J 1/4W
R69 -72			RD14NB2E391J	RD	390 J 1/4W
R75 ,76			RD14NB2E102J	RD	1K J 1/4W
R77 ,78			RD14NB2E471J	RD	470 J 1/4W
R103,104			RD14NB2E122J	RD	1.2K J 1/4W
R109			RD14NB2E103J	RD	10K J 1/4W
R110			RD14NB2E221J	RD	2-2K J 1/4W
R125			RD14NB2E477J	RD	4.7 J 1/4W

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# SPECIFICATIONS

# KM-X1

## AUDIO SECTION

Rated power output (FTC)

### STEREO MODE

130 watts per channel minimum RMS, both channels driven, at 8  $\Omega$  from 20 Hz to 20 kHz with no more than 0.03 % total harmonic distortion.

### SURROUND MODE

Front

100 watts per channel minimum RMS, both channels driven, at 6  $\Omega$  from 20 Hz to 20 kHz with no more than 0.03% total harmonic distortion.

Center

100 watts per channel minimum RMS, both channels driven, at 6  $\Omega$  from 20 Hz to 20 kHz with no more than 0.03% total harmonic distortion.

Rear (Surround)

100 watts per channel minimum RMS, both channels driven, at 6  $\Omega$  from 20 Hz to 20 kHz with no more than 0.03% total harmonic distortion.

Sub woofer

100 watts per channel minimum RMS, both channels driven, at 6  $\Omega$  from 20 Hz to 20 kHz with no more than 0.03% total harmonic distortion.

Input sensitivity/impedance

MAIN IN ..... 1V/33k $\Omega$

Total harmonic distortion

### STEREO MODE

..... 0.0015 % (1 kHz, 65 W, 8  $\Omega$ )

Frequency response

MAIN IN ..... 10 Hz-100 kHz, +0 dB, - 3 dB

Signal to noise ratio

(IHF A)

MAIN IN ..... 105 dB

## GENERAL

Power consumption ..... 7 A

Dimensions ..... W:440 mm (17-5/16")  
H: 161.5 mm (6-3/8")  
D: 380 mm (14 15/16")

Weight (Net) ..... 20 kg (44.1 lb)

# KM-X1

**Note:**

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

KENWOOD CORPORATION

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